

Amendments to the Claims

1-2. (Canceled)

3. (Currently amended) A program-signal recording and reproducing apparatus for recording a program signal on a recording medium, and reproducing an already-recorded portion of the program signal which is being recorded on the recording medium, the apparatus comprising:

time information generating means for generating time information in accordance with lapse of time;

recording means for recording the time information generated by the time information generating means or time information indicating time at which the program signal is broadcasted on the recording medium together with the program signal;

a head retrieval command input means for sequentially performing program head retrieval commands; and

first head retrieval reproduction means for, when each of the program head retrieval commands is performed by the head retrieval command input means, obtaining present time information generated by the time information generating means and performing head retrieval reproduction of the program signal recorded at one of specific time points which are previous to and independent of the present time represented by the obtained present time information, and which are after a beginning of the recording of the program signal on the recording medium and in a duration of the recorded program signal;

wherein the specified time points are sequentially selected by the first head retrieval reproduction means in response to the program head retrieval commands in an order such that first selected one of the specified time points is closer to the present time than others of the specified time points are.

4. (Original) A program-signal recording and reproducing apparatus as recited in claim 3, further comprising:

a cache playback mode in which a program signal temporally continuous from past to now is always recorded on a recording

medium while a prescribed amount is a limit, and an already-recorded portion of the program signal which is being recorded is reproduced;

a time shift playback mode in which, with respect to a program signal recorded on the recording medium on the basis of a record start timing decided by operation by a user, and an already-recorded portion of the program signal which is being recorded is reproduced; and

second head retrieval reproduction means for, when the program head retrieval command is performed by the head retrieval command input means, performing head retrieval reproduction of the program signal from the record start timing;

wherein the head retrieval reproduction is performed by the first head retrieval reproduction means in the cache playback mode, and the head retrieval reproduction is performed by the second head retrieval reproduction means in the time shift playback mode.

5. (Currently amended) A program-signal recording and reproducing apparatus comprising:

first means for recording a program signal on a recording medium;

second means for generating first time information representing the present time;

third means for generating second time information representing one of (1) time at which the program signal was recorded by the first means and (2) time at which the program signal was broadcasted;

fourth means for determining specified time points which precede and are independent of the present time represented by the first time information generated by the second means, and which are after a beginning of the recording of the program signal on the recording medium and in a duration of the recorded program signal; and

fifth means for finding a segment of the program signal on the recording medium according to each of the specified time points determined by the fourth means and the second time information generated by the third means, the program-signal segment

relating to the second time information corresponding to the specified time point, and for reproducing the found segment and subsequent segments of the program signal from the recording medium;

wherein the specified time points are sequentially selected by the fifth means in an order such that first selected one of the specified time points is closer to the present time than others of the specified time points are.

6-7. (Canceled)

8. (Currently amended) A program-signal recording and reproducing apparatus comprising:

first means for recording a first program signal on a recording medium while leaving only a latest temporally-continuous portion of the first program signal in the recording medium as a cached portion;

second means for generating first time information representing the present time;

third means for generating second time information representing one of (1) time at which the first program signal was recorded by the first means and (2) time at which the first program signal was broadcasted;

fourth means for determining specified time points which precede and are independent of the present time represented by the first time information generated by the second means, and which are after a beginning of the recording of the first program signal on the recording medium and in a duration of the recorded first program signal;

fifth means for sequentially accepting head-retrieval commands;

sixth means responsive to each of the head-retrieval commands accepted by the fifth means for finding a segment of the latest temporally-continuous portion of the first program signal on the recording medium according to one of the specified time points determined by the fourth means and the second time information generated by the third means, the program-signal segment relating to the second time information corresponding to the one of the specified time points, and for reproducing the found segment and

subsequent segments of the first program signal from the recording medium during a cache playback mode of operation;

seventh means for recording a second program signal on the recording medium in response to a designated record start timing; and

eighth means responsive to each of the head-retrieval commands accepted by the fifth means for reproducing the second program signal from the recording medium during a time shift playback mode of operation;

wherein the specified time points are sequentially selected by the sixth means in an order such that first selected one of the specified time points is closer to the present time than others of the specified time points are.

9-10. (Canceled)

11. (Previously presented) A program-signal recording and reproducing apparatus as recited in claim 3, wherein each of the specified time points has a minute part of one of (1) 00 and (2) 30.

12. (Previously presented) A program-signal recording and reproduction apparatus as recited in claim 3, wherein the first head retrieval reproduction means comprises means for performing head retrieval reproduction of the program signal from the beginning of the recording of the program signal when none of the specified time points are usable as effective ones.

13. (New) A program-signal recording and reproducing apparatus as recited in claim 5, wherein each of the specified time points has a minute part of one of (1) 00 and (2) 30.

14. (New) A program-signal recording and reproducing apparatus as recited in claim 8, wherein each of the specified time points has a minute part of one of (1) 00 and (2) 30.

15. (New) A program-signal recording and reproducing apparatus as recited in claim 11, wherein each of the specified time points is independent of the beginning of the recording of the program signal on the recording medium.

16. (New) A program-signal recording and reproducing apparatus as recited in claim 13, wherein each of the specified time points is independent of the beginning of the recording of the program signal on the recording medium.

17. (New) A program-signal recording and reproducing apparatus as recited in claim 14, wherein each of the specified time points is independent of the beginning of the recording of the first program signal on the recording medium.